

## §§ 193.2323–193.2329

with the ASME Boiler and Pressure Vessel Code (Section VIII Division 1) (incorporated by reference, *see* §193.2013), except that 100 percent of welds that are both longitudinal (or meridional) and circumferential (or latitudinal) of hydraulic load bearing shells with curved surfaces that are subject to cryogenic temperatures must be nondestructively examined in accordance with the ASME Boiler and Pressure Vessel Code (Section VIII Division 1) (incorporated by reference, *see* §193.2013).

(b) For storage tanks with internal design pressures at 15 psig or less, ultrasonic examinations of welds on metal containers must comply with the following:

(1) Section 7.3.1.2 of NFPA 59A (2006) (incorporated by reference, *see* §193.2013);

(2) Appendices Q and C of API 620 Standard (incorporated by reference, *see* §193.2013);

(c) Ultrasonic examination records must be retained for the life of the facility. If electronic records are kept, they must be retained in a manner so that they cannot be altered by any means; and

(d) The ultrasonic equipment used in the examination of welds must be calibrated at a frequency no longer than eight hours. Such calibrations must verify the examination of welds against a calibration standard. If the ultrasonic equipment is found to be out of calibration, all previous weld inspections that are suspect must be reexamined.

[Amdt. 193–22, 75 FR 48605, Aug. 11, 2010]

## §§ 193.2323–193.2329 [Reserved]

### Subpart E—Equipment

#### § 193.2401 Scope.

After March 31, 2000, each new, replaced, relocated or significantly altered vaporization equipment, liquefaction equipment, and control systems must be designed, fabricated, and installed in accordance with requirements of this part and of NFPA 59A. In the event of a conflict between this part and NFPA 59A (incorporated by

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reference, *see* §193.2013), this part prevails.

[Amdt. 193–17, 65 FR 10960, Mar. 1, 2000, as amended by Amdt. 193–18, 69 FR 11337, Mar. 10, 2004]

### VAPORIZATION EQUIPMENT

## §§ 193.2403–193.2439 [Reserved]

#### § 193.2441 Control center.

Each LNG plant must have a control center from which operations and warning devices are monitored as required by this part. A control center must have the following capabilities and characteristics:

(a) It must be located apart or protected from other LNG facilities so that it is operational during a controllable emergency.

(b) Each remotely actuated control system and each automatic shutdown control system required by this part must be operable from the control center.

(c) Each control center must have personnel in continuous attendance while any of the components under its control are in operation, unless the control is being performed from another control center which has personnel in continuous attendance.

(d) If more than one control center is located at an LNG Plant, each control center must have more than one means of communication with each other center.

(e) Each control center must have a means of communicating a warning of hazardous conditions to other locations within the plant frequented by personnel.

## § 193.2443 [Reserved]

#### § 193.2445 Sources of power.

(a) Electrical control systems, means of communication, emergency lighting, and firefighting systems must have at least two sources of power which function so that failure of one source does not affect the capability of the other source.

(b) Where auxiliary generators are used as a second source of electrical power:

(1) They must be located apart or protected from components so that